

# ABSTRACT

In an input voice pitch normalization device (Tr) equipped  
in a voice recognition device (VRAp) for recognizing an input  
voice (Svc) uttered by unlimited speakers, and used to change a  
pitch of the input voice (Svu) to be in a predetermined  
relationship with voice recognition sample data (Psf), a pitch  
difference determination device (3, 5, 7, 9; #100, #200, #300,  
#400) determines a pitch difference (CR) between said input voice  
(Svu) and said voice recognition sample data (Psf), and a pitch  
change device (11, 3; #500) changes, based on the pitch difference  
(CR) determined by said pitch difference determination device (3,  
5, 7, 9; #100, #200, #300, #400), a frequency of the input voice  
(Svu) in such a manner as to make the pitch of said input voice  
has a predetermined relationship ( $CR = 1$ ) with the pitch of said  
voice recognition sample data (Psf).